REMARKS

Enclosed herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a Substitute Sequence Listing to be inserted into the specification as indicated above.

The Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a disk copy of the Substitute Sequence Listing. The disk copy of the Substitute Sequence Listing, file "2004-10-11 2121-0179P.ST25.txt", is identical to the paper copy, except that it lacks formatting.

The specification, claims are amended to correctly identify each amino acid and nucleotide sequence with a corresponding SEQ ID NO. The amendments to the figures are being made to remove typographical errors regarding the numbering of each SEQ ID NO. No new matter is introduced by these amendments.

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Gerald M. Murphy, Jr., #28,977

GMM/PSQ/las 2121-0179P P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

Attachments:

Disk Copy of Sequence Listing Paper Copy of Sequence Listing Copy of Notice to Comply

AMENDMENTS TO THE DRAWINGS

The attached sheets of replacement drawings includes the following changes:

Figure 14A(a) - replaced "Seq. No. 1" at top of page with "SEQ ID NOS: 38 and 39"

Figure 14B(a) - replaced "Seq No. 3" at top of page with "SEQ ID NO: 44"

Figure 14C - inserted "SEQ ID NO: 45" at top of page

Figure 15A - replaced "Seq No 2" at top of page with "SEQ ID NOS: 40 and 41" $^{\circ}$

Figure 15B - replaced "Seq No 4" at top of page with "SEQ ID NO: 46"

Figure 15C - replaced "Seq No. 6" at top of page with "SEQ ID NO: 47"

Replacement sheets for Figures 14A(a), 14B(a), 14C, 15A, 15B, and 15C are enclosed herewith and replace the original sheets 14A(a), 14B(a), 14C, 15A, 15B, and 15C.